



# California Regional Water Quality Control Board

## San Francisco Bay Region



Linda S. Adams  
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Arnold Schwarzenegger  
Governor

Certified Mail No.  
7005 1160 0003 6332 8638

Date: **JAN 30 2007**

File No. 43S0056 (MS)

International Business Machines  
Attn: Mr. Jim Bell [jbell@us.ibm.com]  
5600 Cottle Road  
San Jose, CA 95193-0001

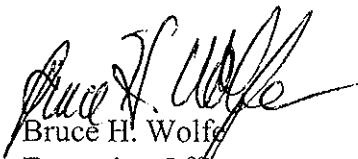
SUBJECT: Order No. R2-2007-0004, Amendment of Site Cleanup Requirements Order No. R2-2002-0082, for International Business Machines, 5600 Cottle Road, San Jose, Santa Clara County

Dear Mr. Bell:

Attached please find Water Board Order No. R2-2007-0004, amending Site Cleanup Requirements Order No. R2-2002-0082, for the subject site. The Water Board adopted Order No. R2-2007-0004 at its monthly public meeting on January 23, 2007. This Order incorporates the requirements for recharge of extracted and treated groundwater into Order No. R2-2002-0082.

If you have any questions regarding this letter, please contact Max Shahbazian of my staff at (510) 622-4824 or by email at [MS Shahbazian@waterboards.ca.gov](mailto:MS Shahbazian@waterboards.ca.gov).

Sincerely,

  
Bruce H. Wolfe  
Executive Officer

Attachment: Water Board Order No. R2-2007-0004  
cc with attachment: Mailing List (via e-mail)

**MAILING LIST**  
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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

ORDER NO. R2-2007-0004

AMENDMENT OF SITE CLEANUP REQUIREMENTS (ORDER NO. R2-2002-0082) FOR:  
INTERNATIONAL BUSINESS MACHINES

for the property located at

5600 COTTLE ROAD  
SAN JOSE, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Water Board), finds that:

1. **Water Board Order:** The Water Board adopted Site Cleanup Requirements for this site on August 20, 2002 (Order No. R2-2002-0082).
2. **Reason for Amendment:** Order No. R2-2002-0082 requires International Business Machines (IBM) to implement its remedial action plan, which includes recharge of extracted and treated groundwater. The Water Board formerly permitted the groundwater recharge under IBM's individual National Pollutant Discharge Elimination System (NPDES) permit (Order No. 99-094, NPDES Permit No. CAO027961). The Water Board rescinded IBM's individual NPDES permit on January 23, 2007. This amendment incorporates groundwater recharge requirements into Order No. R2-2002-0082.
3. **CEQA:** This action is an amendment of an order to enforce the laws and regulations administered by the Water Board. As such, this action is categorically exempt from the provision of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.
4. **Notification:** The Water Board has notified the discharger and all interested agencies and persons of its intent under California Water Code Section 13304 to amend site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.
5. **Public Hearing:** The Water Board, at a public meeting, heard and considered all comments pertaining to this Tentative Order.

**IT IS HEREBY ORDERED**, pursuant to Section 13304 of the California Water Code, that Order No. R2-2002-0082 shall be amended as follows:

1. Add the following new paragraph at the end of finding 4:

The site is subject to the General NPDES VOC Permit No. CAG912003 (Order No. R2-2004-0055) adopted on July 21, 2004, with respect to any surface water discharges from the groundwater extraction and treatment system.

2. The last paragraph of finding 12b is revised to read:

The current groundwater extraction system consists of six onsite and three off site A-aquifer zone extraction wells (RA-02, RA-25, RA-27, RA-30, RA-31, RA-32 and 12-A, ORA-4, ORA-5, respectively), one onsite B-aquifer zone extraction well (RB-08), and one offsite B-aquifer zone extraction well (ORB-6). Groundwater from the extraction wells is treated at the onsite air stripper treatment system and reinjected into the B-aquifer zone through two onsite recharge wells BR-1 and BR-2. Both recharge wells are located up-gradient of onsite extraction wells. The treated groundwater pH is adjusted prior to recharge to prevent recharge-well fouling, and a chemical is added to the air stripper influent to prevent scaling. The average and maximum recharge flow rates for both wells combined are 0.65 million gallons per day (mgd) and 1 mgd, respectively.

3. Add new Prohibition A.4:

Total recharge volume shall not exceed 1 million gallons per day.

4. Add new Cleanup Standard B.3:

#### B.3 Groundwater Recharge Specifications

- a. The following limitations apply to the organic constituents in the recharge water after full treatment but before reinjecting into the existing and future recharge wells:

**Table 4. Recharge Water Cleanup Standards**

Organic Constituent	Maximum Limit (ug/l)	Basis of Cleanup Standard
1,1,1-Trichloroethane	5	BAT
1,1- Dichloroethene	5	BAT
1,1-Dichloroethane	5	BAT
Cis-1,2-Dichloroethene	5	BAT
Methylene Chloride	5	BAT
Perchloroethylene	5	BAT
Trichloroethylene	3	Order
Benzene	1	MCL
Chloroform	5	BAT
Freon 113	5	BAT
Xylenes (total)	5	BAT

**Table Notes:**

BAT = Best Available Technology.

MCL = Maximum Contaminant Levels, California Department of Health Services, September 2006.

Order = Water Board Order No. R2-2002-0082.

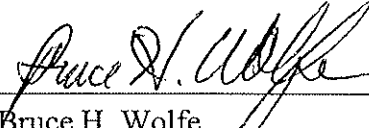
b. The pH of the recharge water shall not exceed 8.5 nor be less than 6.5.

5. The Self-Monitoring Program shall be updated to reflect the recent changes in the groundwater monitoring network of the site and include the following new paragraph:

Samples of recharge water shall be collected at the wellhead of each recharge well or at a point in the onsite groundwater treatment system immediately following treatment but before it is reinjected into the recharge wells. The recharge water samples shall be collected, measured and analyzed on a monthly basis for the following parameters and constituents:

- a. Flow rate (gpm and gpd)
- b. pH (units)
- c. VOCs (ug/l) EPA test method 8260B (only the VOCs that are identified in Table 4 above should be reported).

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the Water Board on January 23, 2007.

  
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Bruce H. Wolfe  
Executive Officer

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FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY.

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